turn communicates with the proxy at the network end of the connection (hereafter the "remote proxy").

The presence of the local proxy allows the use of various techniques that enhance the apparent speed of the connection to the network. One can design the local proxy to employ such techniques without changing users' browser software. Ultimately, one or more such techniques may be built into browser software, effectively building the local proxy into the browser. However, the present invention can be used with existing browsers by providing separate local proxy software.

A preferred technique that can be used with the local proxy for enhancing the apparent connection speed relies on the fact that, at present, computational speed and ability at the user station is more readily available, and cheaper, than a faster connection. Thus, the invention relies on the retrieval of a cached version of a requested page and the subsequent transmission from the remote proxy to the local proxy of only the differences between the cached version and the current version. The user station, using its relatively fast and cheap computational resources, reconstructs the current page from the cached version and the received difference data.

A preferred technique for calculating the difference data is the technique described in copending United States Patent Application No. 08/355,889, filed December 14, 1994, now abandoned, which is hereby incorporated by reference in its entirety. However, other techniques, as may be known to or developed by those skilled in the art, may be used.

In order for the remote proxy to be able to send the difference data to the local proxy, it must calculate the difference data by comparing the current

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